

AMENDMENTS

IN THE CLAIMS:

Please cancel claims 1-6, 11-12, 15 and 18-21. Please add new claims 22-53 as follows:

22. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:1, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, position
1-276 of SEQ ID NO:5 and degenerate codon equivalents thereof.

23. The purified polynucleotide of claim 22, wherein said polynucleotide is
produced by recombinant techniques.

24. The purified polynucleotide of claim 22, wherein said polynucleotide is
produced by synthetic techniques.

25. The purified polynucleotide of claim 22 further comprising:
a sequence encoding at least one epitope.

26. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably
linked to a control sequence compatible with a desired host, the nucleic acid sequence
selected from the group consisting of SEQ ID NO:1, position 4-269 of SEQ ID NO:2,
SEQ ID NO:3, position 1-276 of SEQ ID NO:4, position 1-276 of SEQ ID NO:5, and
degenerate codon equivalents thereof.

27. A cell transfected with the recombinant expression system of claim 26.

28. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, position 4-269 of SEQ ID NO:2, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, position 1-276 of SEQ ID NO:5 and degenerate codon equivalents thereof.

29. A method for producing a polypeptide comprising at least one epitope, the method comprising:

incubating host cells that have been transfected with an expression vector containing a polynucleotide sequence encoding a polypeptide, the polynucleotide sequence selected from the group consisting of SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14 and degenerate codon equivalents thereof.

30. A composition of matter comprising a purified polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, position 1-276 of SEQ ID NO:5, and degenerate codon equivalents thereof.

31. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:4, SEQ ID NO:5 and degenerate codon equivalents thereof.

32. A purified polynucleotide, selected from the group consisting of:
SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and
degenerate codon equivalents thereof.

33. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, and degenerate codon equivalents thereof.

34. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and degenerate codon equivalents thereof.

cn⁷
C₁
35. A composition of matter comprising a purified polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, and degenerate codon equivalents thereof.

36. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:1, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, and
position 1-276 of SEQ ID NO:5.

37. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, position 4-269 of SEQ ID NO:2, SEQ ID NO:3, position 1-276 of SEQ ID NO:4 and position 1-276 of SEQ ID NO:5.

38. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, position 4-269 of SEQ ID NO:2, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, and position 1-276 of SEQ ID NO:5.

39. A method for producing a polypeptide comprising at least one epitope, the method comprising:

incubating host cells that have been transfected with an expression vector containing a polynucleotide sequence encoding a polypeptide, the polynucleotide sequence selected from the group consisting of SEQ ID NO:12, SEQ ID NO:13 and SEQ ID NO:14.

40. A composition of matter comprising a purified polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, position 1-276 of SEQ ID NO:4, and position 1-276 of SEQ ID NO:5.

41. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:4 and SEQ ID NO:5.

42. A purified polynucleotide, selected from the group consisting of:
SEQ ID NO:1 and SEQ ID NO:3-5.

43. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NOS:3-5.
44. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NOS:3-5.
45. A composition of matter comprising a purified polynucleotide selected from the group consisting of: SEQ ID NO:1 and SEQ ID NOS:3-5.
46. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:1; SEQ ID NO:3 and degenerate codon equivalents thereof.
47. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and degenerate codon equivalents thereof.
48. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3 and degenerate codon equivalents thereof.

49. A composition of matter comprising a purified polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, and degenerate codon equivalents thereof.

50. A purified polynucleotide selected from the group consisting of:
SEQ ID NO:1 and SEQ ID NO:3.

51. A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

52. A cell transfected with a nucleic acid sequence encoding at least one epitope, the nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

53. A composition of matter comprising a purified polynucleotide selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

REMARKS

Claims 1-6, 11-12, 15 and 18-21 are provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 10-16, 30, 33, 35, 38 and 48 of copending Application No. 09/065,383. Claims 1-6, 11-12, 15 and 18-21 have been cancelled. As the Examiner states, the conflicting claims are not identical with the removal of "fragments" or "complements language. New claims 22-53 do not include "fragments" or "complements" language and are therefore, no longer in conflict.